

WHAT IS CLAIMED IS:

1. An image transmission apparatus for processing
hierarchically encoded image information, comprising:

- (a) designation means for designating a
5 resolution of the image information; and
(b) accounting means for performing accounting
processing in correspondence with the resolution.

2. An apparatus according to claim 1, further
10 comprising paying means for paying the charge of the
image at predetermined time intervals.

3. An apparatus according to claim 2, wherein
said accounting means is arranged on a transmitting
15 side.

4. An apparatus according to claim 2, wherein
said accounting means is arranged on a receiving side.

5. An apparatus according to claim 2, wherein
20 said accounting means is arranged on both transmitting
and receiving sides.

6. An apparatus according to claim 1, wherein
25 said accounting means is arranged on a transmitting
side.

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7. An apparatus according to claim 1, wherein
said accounting means is arranged on a receiving side.

8. An apparatus according to claim 1, wherein
5 said accounting means is arranged on both transmitting
and receiving sides.

9. An apparatus according to claim 1, further
comprising cipher means for performing at least one of
10 encipherment and digital signature for the information
to be transmitted.

10. An image transmission apparatus for
processing hierarchically encoded image information,
15 comprising:

(a) accounting means for performing accounting
processing in correspondence with a resolution of the
image information; and

(b) charge storage means for storing a charge of
20 an image calculated by said accounting means.

11. An apparatus according to claim 10, further
comprising paying means for paying the charge of the
image at predetermined time intervals.

12. An apparatus according to claim 11, wherein said accounting means is arranged on a transmitting side.

5 13. An apparatus according to claim 11, wherein
said accounting means is arranged on a receiving side.

14. An apparatus according to claim 11, wherein
said accounting means is arranged on both transmitting
10 and receiving sides.

15. An apparatus according to claim 10, wherein said accounting means is arranged on a transmitting side.

16. An apparatus according to claim 10, wherein said accounting means is arranged on a receiving side.

17. An apparatus according to claim 10, wherein
20 said accounting means is arranged on both transmitting
and receiving sides.

18. An apparatus according to claim 10, further comprising cipher means for performing at least one of 25 encipherment and digital signature for the information to be transmitted.

19. An image transmission apparatus for processing hierarchically encoded image information, comprising:

- (a) designation means for designating a
5 resolution of the image information; and
- (b) accounting means for performing accounting processing in correspondence with the resolution and a volume of the image information.

10 20. An apparatus according to claim 19, further comprising paying means for paying the charge of the image at predetermined time intervals.

15 21. An apparatus according to claim 20, wherein said accounting means is arranged on a transmitting side.

20 22. An apparatus according to claim 20, wherein said accounting means is arranged on a receiving side.

23. An apparatus according to claim 20, wherein said accounting means is arranged on both transmitting and receiving sides.

25 24. An apparatus according to claim 19, wherein said accounting means is arranged on a transmitting side.

25. An apparatus according to claim 19, wherein
said accounting means is arranged on a receiving side.

26. An apparatus according to claim 19, wherein
5 said accounting means is arranged on both transmitting
and receiving sides.

27. An apparatus according to claim 19, further
comprising cipher means for performing at least one of
10 encipherment and digital signature for the information
to be transmitted.

28. An image transmission apparatus for
processing hierarchically encoded image information,
15 comprising:

(a) accounting means for performing accounting
processing in correspondence with a resolution of the
image information;

(b) information volume measuring means for
20 measuring an information volume of the image
information; and

(c) charge storage means for storing a charge of
an image calculated by said accounting means.

25 29. An apparatus according to claim 28, further
comprising paying means for paying the charge of the
image at predetermined time intervals.

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30. An apparatus according to claim 29, wherein said accounting means is arranged on a transmitting side.

5 31. An apparatus according to claim 29, wherein said accounting means is arranged on a receiving side.

10 32. An apparatus according to claim 29, wherein said accounting means is arranged on both transmitting and receiving sides.

15 33. An apparatus according to claim 28, wherein said accounting means is arranged on a transmitting side.

34. An apparatus according to claim 28, wherein said accounting means is arranged on a receiving side.

20 35. An apparatus according to claim 28, wherein said accounting means is arranged on both transmitting and receiving sides.

25 36. An apparatus according to claim 28, further comprising cipher means for performing at least one of encipherment and digital signature for the information to be transmitted.

(a) accounting means for performing accounting
5 processing in correspondence with a resolution of the
image information;

(c) paying means for paying the charge of the
10 image at predetermined time intervals.

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40. An apparatus according to claim 37, wherein
20 said accounting means is arranged on both transmitting
and receiving sides.

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42. An image transmission apparatus comprising:

(a) image transmission destination designation means for designating an arbitrary image reception apparatus as a transmission destination of an image, and requesting an image provider to transmit the image to the designated apparatus;

(b) image transmission means for transmitting the image to the image reception apparatus designated by said image transmission destination designation means; and

(c) accounting means for performing accounting processing for a person who designates the transmission destination of the image or a user who receives the image.

43. An apparatus according to claim 42, further comprising cipher means for performing at least one of encipherment and digital signature for the information to be transmitted.

44. An image transmission system for processing hierarchically encoded image information, comprising:

(a) accounting means for performing accounting processing in correspondence with a resolution and a volume of the image information;

(b) information volume measuring means for measuring the information volume of the image information;

(c) charge storage means for storing a charge of an image calculated by said accounting means; and

(d) a reception apparatus comprising paying means for paying the charge of the image at predetermined time intervals.

45. A communication apparatus for receiving data via a network, comprising:

(a) detection means for detecting a traffic state of the network; and

(b) designation means for designating a transmission format of the data in accordance with a detection result of said detection means.

46. An apparatus according to claim 45, wherein said designation means designates the transmission format to a transmission terminal via the network.

47. An apparatus according to claim 45, wherein the transmission format is a layer in hierarchical encoding.

48. An image transmission system for transmitting hierarchically encoded image information, comprising:

(a) selection means for selecting a layer of an image to be transmitted in correspondence with a traffic of a transmission line for transmitting the hierarchically encoded image information; and

- 5 (b) accounting processing means for performing accounting processing of the image information to be transmitted in correspondence with the layer selected by said selection means.

10 49. A system according to claim 48, further comprising paying means for paying the charge of the image information at predetermined time intervals.

15 50. A system according to claim 48, wherein said accounting processing means is arranged on a transmitting side.

20 51. A system according to claim 48, wherein said accounting processing means is arranged on a receiving side.

25 52. A system according to claim 48, wherein said accounting processing means is arranged on both transmitting and receiving sides.

53. A system according to claim 48, further comprising cipher means for performing at least one of

encipherment and digital signature for the information to be transmitted.

54. An image transmission system for transmitting
5 image information, which is hierarchically encoded to have different resolutions in units of layers, between a transmission terminal and a reception terminal, comprising:

a reception terminal comprising

10 (a) traffic checking means for checking a traffic of a transmission line for transmitting the hierarchically encoded image information, and

(b) resolution selection means for selecting a resolution of an image to be transmitted in accordance
15 with a checking result of said traffic checking means; and

a transmission terminal comprising

(c) accounting processing means for performing accounting processing of the image information to be
20 transmitted in correspondence with the resolution selected by said resolution selection means, and

(d) charge storage means for storing a charge of the image information.

55. A system according to claim 54, further comprising paying means for paying the charge of the image information at predetermined time intervals.

5 57. A system according to claims 54, wherein said
accounting processing means is arranged on a receiving
side.

59. A system according to claim 54, further comprising cipher means for performing at least one of
15 encipherment and digital signature for the information to be transmitted.

60. An image transmission system for processing hierarchically encoded image information, comprising:

20 (a) traffic checking means for checking a traffic of a transmission line;

(b) resolution selection means for selecting a resolution of an image to be transmitted in accordance with a checking result of said traffic checking means;

25 (c) accounting processing means for performing accounting processing of the image information to be

transmitted in correspondence with the resolution selected by said resolution selection means; and

(d) charge storage means for storing a charge of the image information.

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61. A system according to claim 60, further comprising paying means for paying the charge of the image information at predetermined time intervals.

10 62. A system according to claim 60, wherein said accounting processing means is arranged on a transmitting side.

15 63. A system according to claim 60, wherein said accounting processing means is arranged on a receiving side.

20 64. A system according to claim 60, wherein said accounting processing means is arranged on both transmitting and receiving sides.

25 65. A system according to claims 60, further comprising cipher means for performing at least one of encipherment and digital signature for the information to be transmitted.

66. An image transmission system comprising:

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(a) image transmission destination designation means for designating an arbitrary image reception apparatus as a transmission destination of image information, and requesting an image provider to transmit the image information to the designated apparatus;

(b) image transmission means for transmitting the image information to the image reception apparatus designated by said image transmission destination designation means; and

(c) accounting means for performing accounting processing for a person who designates the transmission destination of the image information or a user who receives the image information.

67. A system according to claim 66, further comprising cipher means for performing at least one of encipherment and digital signature for the information to be transmitted.

68. A communication apparatus in an image transmission system for processing hierarchically encoded image information, comprising:

accounting processing means for performing accounting processing on the basis of a resolution and an information volume of an image in accordance with a

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traffic of a transmission line for transmitting the hierarchically encoded image information.

69. A communication method for transmitting
5 hierarchically encoded data to a reception terminal via a network using a designated layer, comprising the step of:

performing accounting processing in correspondence with the designated layer.

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70. A communication method for receiving hierarchically encoded data via a network, comprising the step of:

designating a layer in the hierarchical encoding.

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71. A communication apparatus comprising:

(a) transmission means for transmitting information including an image;

(b) accounting means for charging a receiver of
20 the information an amount corresponding to a quality of the image.

72. An apparatus according to claim 71, further comprising reception means for receiving the
25 information, and wherein said reception means comprises selection means for selecting the quality of the image.

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73. An apparatus according to claim 72, wherein
said transmission means comprises enciphering means for
enciphering the information, and said reception means
comprises deciphering means for deciphering the
5 enciphered information.

74. An apparatus according to claim 73, wherein
said transmission means comprises enciphering means for
enciphering selection information of said selection
10 means, and said reception means comprises deciphering
means for deciphering the enciphered selection
information.

75. An apparatus according to claim 73, further
15 comprising measuring means for measuring a processing
time of said deciphering means, and wherein said
accounting means performs accounting processing in
correspondence with the time measured by said measuring
means.

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76. An apparatus according to claim 72, wherein
said transmission means comprises enciphering means for
enciphering selection information of said selection
means, and said reception means comprises deciphering
25 means for deciphering the enciphered selection
information.

77. An apparatus according to claim 76, further comprising measuring means for measuring a processing time of said enciphering means, and wherein said accounting means performs accounting processing in
5 correspondence with the time measured by said measuring means.

78. An apparatus according to claim 76, further comprising measuring means for measuring a processing
10 time of said deciphering means, and wherein said accounting means performs accounting processing in correspondence with the time measured by said measuring means.

79. A communication system for communicating
15 image information via a network, comprising:

- (a) designation means, arranged on a receiving side of the image information, for designating an image quality of the image information to be received; and
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- (b) accounting means, arranged on a transmitting side, for transmitting the image information in correspondence with the image quality designated on the receiving side, and performing accounting processing in accordance with the image quality.